# IEEE 802.16 Motion

802.16 Session #11 Closing Plenary: 13 July 2001

Motion: **To place the following motion in front of the LMSC SEC on 13 July 2001: "To grant conditional approval to forward IEEE P802.16 to LMSC Sponsor Ballot under Procedure 10 of the LMSC Operating Rules."** 

Motion by: Carl Eklund Seconded by: Jay Klein Approve: Disapprove: Abstain:

IEEE 802 LMSC Motion

2001-07-13

802 SEC Meeting: 13 July 2001

# Motion: **To grant conditional approval to forward IEEE P802.16 to LMSC Sponsor Ballot under Procedure 10 of the LMSC Operating Rules.**

Motion by: Roger Marks Seconded by: Approve: Disapprove: Abstain: 2001-07-13

# **Background Information**

Letter Ballot #3 on IEEE P802.16/D2-2001 (2001-02-06 to 2001-03-13) Ballots 93 (75% of 124 eligible members) Approve 69 (80.2%) Disapprove 17 Abstain 7

Recirculation Ballot #3a on IEEE P802.16/D3-2001 (2001-05-25 to 2001-06-15) Approve 76 (89.4%) Disapprove 9 [none new] Abstain 8 371 Comments (218 Editorial; 149 Technical, Non-binding; 4 Technical-Binding)

Following comment resolution at Session #14:
Approve 77 (90.6%)
Disapprove 8
Abstain 8
4 new Technical-Binding comments (3 resolved and accepted by voter; 1 remaining)

2001-07-13

{Vote change and resolution acceptance based on email of 11 July 2001 from Paul Thompson:

Roger:

For your information, on July 10 I had the opportunity to discuss my comments to 802.16.1 Recirculation 3a with the 802.16.1 PHY Task Group. Based on that discussion, I am now satisfied with the resolution of the Comments and intend to vote "Approve" at the next Recirculation.

Regards...Paul}

DisapproveLB#3 Vote		Unaccepted	Recirc #2a Vote	Comments
Voter		Comments		
Keith Doucet	Disapprove	9	Did not vote	No reply
Chet Shirali	Disapprove	9	Did not vote	No reply
George Fishel	Disapprove	9	Did not vote	No reply
Menashe Shahar	Disapprove	9	Did not vote	No reply
David Ribner	Disapprove	4	Did not vote	No reply
Bruce Currivan	Disapprove	4	Did not vote	No reply
Srinath Hosur	Disapprove	1	Did not vote	No reply
Allen Klein	Disapprove	3	Disapprove	1

Unaccepted Resolutions by Binding Comment	Voter
Number (Recirc#3a)	
288	Klein

<b>Unaccepted Resolutions by</b>	Voter
Binding Comment	
Number (LB#3)	
766, 767, 1058, 1059, 1060	Doucet, Fishel, Ribner, Shahar, Shirali (Identical
	Comments)
770, 771, 1063, 1064, 1065	Doucet, Fishel, Ribner, Shahar, Shirali (Identical
	Comments)
772, 773, 1066, 1067, 1068	Doucet, Fishel, Ribner, Shahar, Shirali (Identical
	Comments)
796, 797, 1073, 1074	Doucet, Fishel, Shahar, Shirali (Identical Comments)
748, 749, 1048, 1049	Doucet, Fishel, Shahar, Shirali (Identical Comments)
774, 775, 1069, 1070	Doucet, Fishel, Shahar, Shirali (Identical Comments)
763, 765, 1052, 1053, 1054	Doucet, Fishel, Ribner, Shahar, Shirali (Identical
	Comments)
762, 764, 1055, 1056	Doucet, Fishel, Shahar, Shirali (Identical Comments)

2001	-07	-13

768, 769, 1061, 1062	Doucet, Fishel, Shahar, Shirali (Identical Comments)
776, 777, 1071, 1072	Doucet, Fishel, Shahar, Shirali (Identical Comments)
1047	Hosur
717	Currivan
731	Currivan
733	Currivan
736	Currivan
617	Klein
618	Klein
619	Klein

# **Schedule for Letter Ballot Closure**

20 July 2001	Issue Draft 4 and initiate Recirc #2b
30 July 2001	Close Recirc #2b
6 August 2001	Forward to IEEE Balloting Center

Document	under Review:	P802.16/D3-2001	Ballot	Number: 3a			Comment Date
Comment #	288	Comment submitted by:	Allan	Klein			
Change	туре Techr	nical, Binding	Starting Page #	288	Starting Line # 57	Section 8.2.6	
Add additional channelization options to address 10.5 GHz applications. 7 MHz and 3.5 MHz should be included as they are frequently used by products already operating in this frequency band.							

#### Reason

Channel sizes of 20 MHz and greater are not viable for typical frequency allocations at 10.5 GHz, where the overall 150 MHz band is sub-divided for use among many different operators- typically in tranches of 30 MHz. Since the standard is supposed to address applications from 10-66 GHz, at least one of the mandatory channelizations should be suitable for 10.5 GHz applications. The specific channelizations and baud rates were submitted as comments to letter ballot # 3.

Proposed Resolution Recommendation: Recommendation by

**Reason for Recommendation** 

Resolution of Group Decision of Group: Rejected

The fact that the 802.16 (TG1) standard addresses 10-66 GHz does not mean that ANY spectrum oppurtunity could be used for LMDS-like services (i.e., 20 MHz vs. 500 MHz). The example given by the comment is more suitable for the 802.16a (TG3) case which addresses such spectrum oppurtunities in a better way. The fact that 10 GHz is a lower limit to 802.16 (TG1) is more of propagation aspects and suitability of the PHY.

Furthermore, please note the actual language of section 8.2.6 :

"...other combinations of channel size, symbol rate, roll-off factor, and frame duration could be made, but interoperability will not be guaranteed in these cases."

Reason for Group's Decision/Resolution

Group's Notes

Group's Action Items

Editor's Notes Editor's Actions

**Editor's Questions and Concerns** 

Editor's Action Items

Document under Review	N:	Ballot	Number: <b>#3</b>				Comment Date	
Comment # 766	Comment submitted by:	Keith	Doucet		Me	ember		
Change Type Tec	hnical, Binding	Starting Page #	49	Starting Line #	37	Section	6.2.2	
Change the generic header format to DOCSIS 1.1 header. Extended header is required (as defined in DOCSIS). Change HCS to 16 bits.								
Reason								
As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO where, low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO applications. Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless								
Proposed Resolution	Recommendation:		Recommenda	tion by				
Reason for Recommendat	lion							
Resolution of Group	Decision of Group: R	ejected						
Reason for Group's Decision/Resolution For wireless access systems, the suggested headers would cause a significant capacity reduction. The 802.16 system was designed to efficiently carry connectionless as well as connection-oriented protocols and fits seamlessly into a routed IP network. The MAC protocol is well suited to residential and SOHO applications. It is to be noted that the proposed alternative is also connection-oriented.								
Similar suggestions were extensively debated and rejected during development of the draft. Group's Notes								
Group's Action Items								
Editor's Notes	Editor's Actions f) none	needed						
Editor's Questions and Concerns Editor's Action Items								

#### 802.16/D2-2001

Document	under	Review:		Ballot	Number: #3			Comment Date
Comment #	767	Comment submitted by:	Chet		Shirali		Member	
Change	Туре	Technical, Binding	Starting	Page #	49	Starting Line # 37	Section	6.2.2
Change the generic header format to DOCSIS 1.1 header.								
Extended h	eader	is required (as defined in DOCS	SIS).					
Change HC	S to 1	6 bits.						

#### Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO, where low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO applications.

Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

<b>Proposed Resolution</b>	Recommendation:		Recommendation	by						
Reason for Recommendation										
Resolution of Group	Decision of G	roup: Superceded								
Reason for Group's Deci See 766	sion/Resolution									
Group's Notes										
Group's Action Items										
Editor's Notes	Editor's Actions	f) none needed								
Editor's Questions and C Editor's Action Items	oncerns									

Document	under Review:	:		Ballot Number:	# 3	Comment Date
Comment #	1058	Comment submitted	by: George	Fishel		Member
Change	туре <mark>Tech</mark>	nical, Binding	Starting I	Page # 49	Starting Line # 37	Section 6.2.2
Change the Reason	generic hea	der format to DOCS	IS 1.1 header. Ex	ttended header	s required (as defined in D	DCSIS).Change HCS to 16 bits
LMDS targe achieved by environment	t markets are using existin t that is not ty	e residential/SOHO, ng technology as DC ypical to residential/s	where low cost is DCSIS and the he SOHO appplicatio	an important fe ader should be ns. Time to mar	ature and the applications a based on IP environment, r ket will be achieved by mak	S target market and some of the re IP centric. Low cost will be not on connection oriented ing use of a matured standard with ications such as VoIP, QoS, link
Proposed Re	solution	Recommendation: Su	perceded	Recomme	ndation by Roger Marks	
	Recommendatio 766, 767, 10	on 059, and 1060.				
Resolution of 766	Group	Decision of Gro	oup: Superceded			
Reason for ( See 766	Group's Decis	ion/Resolution				
Group's Note	es					
Group's Actio	on Items					
Editor's Note	es	Editor's Actions f	) none needed			
Submitted in	n LB#3, but a	accidentally left out c	f resolution datab	ase.		
Editor's Ques	stions and Co	ncerns				
Editor's Actio	on Items					

#### 802.16/D2-2001

Document	under F	Review:		Ballot	Number: <b>#3</b>			Comment Date
Comment #	1059	Comment submitted by:	David		Ribner		Member	
Change	Туре	Technical, Binding	Starting	Page #	49	Starting Line # 37	Section	6.2.2
Change the generic header format to DOCSIS 1.1 header.								
Extended header is required (as defined in DOCSIS).								
Change HC	S to 16	bits.						

#### Reason

As per IEEE 802.16 decisions, this draft is used for both MMDS and LMDS applications. Most of the MMDS target market and some of the LMDS target markets are residential/SOHO, where low cost is an important feature and the applications are IP centric. Low cost will be achieved by using existing technology as DOCSIS and the header should be based on IP environment, not on connection oriented environment that is not typical to residential/SOHO appplications.

Time to market will be achieved by making use of a matured standard with existing products as DOCSIS (including DOCSIS based wireless

Proposed Resolution	Recommendation:	Superceded	Recommendation	by	Roger Marks
Reason for Recommenda	tion				
Duplicate of 766, 767,	1058, and 1060.				
Resolution of Group 766	Decision of	Group: Superceded			
Reason for Group's Dec See 766	ision/Resolution				
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions	f) none needed			
Submitted in LB#3, but	accidentally left ou	it of resolution data	abase.		
Editor's Questions and C	Concerns				
Editor's Action Items					



Document	under R	eview:				Ballot	Number	<b># 3</b>					Comment Date
Comment #	1060	Com	nment submitte	d by: Me	nashe		Shahar				Member		
Change	Туре	Technical,	Binding		Starting	Page #	49	Startin	g Line #	37	Section	6.2.2	
•	eader is	s required (a	rmat to DOCS as defined in										
Reason													
LMDS targe achieved by environment	et marke v using v t that is	ets are resid existing tec not typical	this draft is u lential/SOHO hnology as Do to residential d by making	where, lo OCSIS ar /SOHO aj	w cost i nd the h opplicat	is an imp leader s lions.	portant t hould b	feature and e based on	the appl IP envir	lications a onment,	are IP centric not on conne	. Low co ection orio	st will be
Proposed Re	solution	Recom	nmendation: Su	uperceded			Recomm	nendation by	Roger Ma	arks			
Reason for F Duplicate of			nd 1059.										
Resolution of 766	f Group		Decision of Gr	oup: Supe	rceded								
Reason for 0 See 766	Group's	Decision/Res	solution										
Group's Note	es												
Group's Actio	on Items	6											
Editor's Note	es	Edit	or's Actions	f) none need	ed								
Submitted in	n LB#3,	but accide	ntally left out	of resoluti	ion data	abase.							
Editor's Ques	stions a	nd Concerns	;										
Editor's Actio	on Items	3											

Document	under F	Review:	Ballot	Number: <b>#3</b>			Comment Date			
Comment #	776	Comment submitted by:	Keith	Doucet		Member				
Change	Туре	Technical, Binding	Starting Page #	69	Starting Line # 3	Section	6.2.2.2.6			
		be transmitted by the BS in res r received data or MAC messa		RNG-REQ or	to send corrections, base	ed on measu	urements that have			
based on m messages,	This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated ased on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates. This is mainly important for NLOS channles with more dynamic changing parameters.									
Proposed Re	esolutior	Recommendation:		Recommenda	tion by					
Reason for	Recomm	endation								
Resolution of 777	f Group	Decision of Group: A	Accepted-Duplicate							
Reason for	Group's	Decision/Resolution								
Group's Note	es									
Group's Acti	on Item	S								
Editor's Note	es	Editor's Actions f) none	needed							
Editor's Que Editor's Activ										

Document ur	nder Review:		Ва	allot Nur	mber: #3			Comment Date	
Comment # 7	77	Comment submitted by:	Chet	Shi	nirali	Me	ember		
Change	Type Techn	ical, Binding	Starting Page	e # <mark>6</mark> 9	Starting Line	# 3	Section	6.2.2.2.6	
been done or Reason This change e based on mea messages, wh	RNG-RSP shall be transmitted by the BS in response to received RNG-REQ or to send corrections, based on measurements that have een done on other received data or MAC messages.								
Proposed Reso	olution R	ecommendation:		Rec	commendation by				
Reason for Re	commendation	I							
Resolution of (	Group	Decision of Group: A	ccepted						
Reason for Gr	oup's Decisio	n/Resolution							
Group's Notes									
Group's Action	Items								
Editor's Notes		Editor's Actions i) to do							
Editor's Questi Editor's Action		cerns							



Document	under F	Review:		Ballot	Number:	# 3		Comment Date
Comment #	1071	Comment submitted by:	George		Fishel		Member	
Change	Туре	Technical, Binding	Starting	Page #	69	Starting Line # 3	Section	6.2.2.2.6
•		-RSP shall be transmitted by the on other received data or M		•	o received	RNG-REQ or to send corre	ctions, base	d on measurements
Reason								
based on m	neasure	es faster correction, based on ment information obtained by l can be done at slower rates. T	BS from data	a bursts	while nor	n active modems will be calit	orated by slo	wer rate of RNG-REQ
Proposed Re	esolutior	Recommendation: Superc	eded		Recomme	ndation by Roger Marks		
Reason for	Recomm	endation						
Duplicate of	f 776, 7	77, and 1072.						
Resolution o	f Group	Decision of Group:	Accepted-Dup	olicate				
Reason for	Group's	Decision/Resolution						
Group's Not	es							
Group's Acti	on Item	s						
Editor's Not	es	Editor's Actions f) none	e needed					
Submitted i	n LB#3	, but accidentally left out of res	solution data	base.				
Editor's Que	stions a	nd Concerns						
Editor's Acti	on Item	S						

Document	under F	Review:	Bal	lot	Number: #	3				Comment Date
Comment #	1072	Comment submitted by:	Menashe		Shahar			I	Member	
Change	Туре	Technical, Binding	Starting Page	#	69	Starting	g Line #	3	Section	6.2.2.2.6
	P shall	be transmitted by the BS in resper received data or MAC messa		d F	NG-REQ	or to send	l correct	ions, base	d on meası	urements that have
This change enables faster correction, based on data, without the need for high rate of RNG-REQ messages. Active SSs will be calibrated based on measurement information obtained by BS from data bursts while non active modems will be calibrated by slower rate of RNG-REQ messages, which can be done at slower rates. This is mainly important for NLOS channles with more dynamic changing parameters.										
Proposed R	esolutio	Recommendation: Superce	eded		Recommer	dation by	Roger Ma	arks		
Reason for Duplicate of		endation 777, and 1071.								
Resolution of 777	of Group	Decision of Group: A	ccepted-Duplicate	е						
Reason for	Group's	Decision/Resolution								
Group's Not	tes									
Group's Act	ion Item	S								
Editor's Not	es	Editor's Actions f) none	needed							
Submitted	in LB#3	, but accidentally left out of res	olution database							
Editor's Que	estions a	and Concerns								
Editor's Act	ion Item	S								

Document und	er Review:		Ballot	Number: <b>#3</b>			Comment Date		
Comment # 77	0	Comment submitted by:	Keith	Doucet		Member			
Change Ty	ype Technic	al, Binding	Starting Page #	56	Starting Line # 28	Section	6.2.2.2.1-2,		
DCD and UCD messages should be adapted to support OFDM PHY and adaptive modulation. It is required to configure the OFDM parameters in these messages. The messages should enable the definition of multiple profiles for each usage code (DIUC/ UIUC). Reason									
These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.									
Proposed Resolu	ution Re	commendation:		Recommendat	ion by				
Reason for Reco	ommendation								
Resolution of Gr	oup	Decision of Group: F	Rejected						
Reason for Grou These message 802.16a and 80	es are based		support this in the f	uture when ar	n OFDM PHY is fir	nalized. This will be	done under the PARs		
Group's Notes									
Group's Action I	Items								
Editor's Notes	I	Editor's Actions f) none	needed						
Editor's Question	Editor's Questions and Concerns								
Editor's Action I	Items								

Document u	Inder Review:		Ballot	Number: <b># 3</b>		Comment Date		
Comment #	771	Comment submitted by:	Chet	Shirali	Mem	ber		
Change	туре Techn	ical, Binding	Starting Page #	56 Starting I	.ine # 28 S	Section 6.2.2.2.1-2,		
	•	should be adapted to stages. The messages sh		•				
These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.								
Proposed Res	solution F	Recommendation:		Recommendation by				
Reason for R	ecommendatior	ı						
Resolution of 770	Group	Decision of Group: S	uperceded					
Reason for G See 770	iroup's Decisio	on/Resolution						
Group's Notes	S							
Group's Actio	n Items							
Editor's Notes	S	Editor's Actions f) none	needed					
Editor's Quest	tions and Con	cerns						
Editor's Actio	n Items							

Document under Reviev	v:	Ballot	Number: <b>#3</b>			Comment Date
Comment # 1063	Comment submitted by:	George	Fishel		Member	
Change Type Tec	hnical, Binding	Starting Page #	56	Starting Line # 28	Section	6.2.2.2.1-2,
	es should be adapted to su essages. The messages sho					
•	esigned for single carrier. P and adaptive modulation a lent.		· · · · · · · · · · · · · · · · · · ·			
Proposed Resolution	Recommendation: Superced	ded	Recommendati	on by Roger Marks		
Reason for Recommendat Duplicate of 770, 771, 1						
Resolution of Group 770	Decision of Group: Su	uperceded				
Reason for Group's Deci See 770	sion/Resolution					
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions f) none n	needed				
Submitted in LB#3, but	accidentally left out of reso	olution database.				
Editor's Questions and C Editor's Action Items	oncerns					

Document under Review	w:	Ballot	Number: <b>#3</b>		Comment Date
Comment # 1064	Comment submitted by:	David	Ribner	Ν	Лember
Change Type Tec	hnical, Binding	Starting Page #	56 Starti	ng Line # <mark>28</mark>	Section 6.2.2.2.1-2,
•	es should be adapted to su essages. The messages sho				
•	and adaptive modulation a	-			and 802.16.3) has not been eient operation in the Non Line of
Proposed Resolution	Recommendation: Superced	led	Recommendation by	Roger Marks	
Reason for Recommendat	tion				
Duplicate of 770, 771,	1063, and 1065.				
Resolution of Group	Decision of Group: Su	Iperceded			
Reason for Group's Deci See 770	sion/Resolution				
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions f) none n	eeded			
Submitted in LB#3, but	accidentally left out of reso	lution database.			
Editor's Questions and C	oncerns				
Editor's Action Items					

Document under Review:		Ballot	Number: <b>#3</b>		Comment Date			
Comment # 1065 C	Comment submitted by:	Menashe	Shahar	Ν	<i>l</i> ember			
Change Type Technic	al, Binding	Starting Page #	56 Sta	arting Line # 28	Section 6.2.2.2.1-2,			
DCD and UCD messages si parameters in these message Reason					•			
These messages are designed for single carrier. PHY layer for the 802.16.3 (this draft is for both 802.16.1 and 802.16.3) has not been selected yet but OFDM and adaptive modulation are required by the customers to support reliable and efficient operation in the Non Line of Sight (NLOS) environment.								
Proposed Resolution Rec	commendation: Superced	led	Recommendation	by Roger Marks				
Reason for Recommendation Duplicate of 770, 771, 1063	, and 1064.							
Resolution of Group	Decision of Group: Su	perceded						
Reason for Group's Decision/ See 770	Resolution							
Group's Notes Group's Action Items								
•								
Editor's Action Items								

#### 802.16/D2-2001

Document under Review:		Ballot	Number: <b>#3</b>			Comment Date
Comment # 736	Comment submitted by:	Bruce	Currivan	M	ember	
Change Type Tech	nical, Binding	Starting Page #	106 Starting Lin	e # 44	Section 6.2.3.4	
delete "for future study"; Reason	Add section defining deta	ills of ARQ function.				
ARQ needs to be better of	defined before the draft is	approved.				
Proposed Resolution	Recommendation:		Recommendation by			
Reason for Recommendation	on					
Resolution of Group	Decision of Group: S	uperceded				
Reason for Group's Decision This is the place holder for necessary in the current	or PARs 802.16a and 80					so it is not
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions f) none	needed				

Editor's Questions and Concerns

**Editor's Action Items** 

Document under Review:	Ballot	Number: #3	Comment Date
Comment # 731 Comment	submitted by: Bruce	Currivan	Member
Change Type Technical, Bind	ing Starting Page #	99 Starting Line # 18	Section 6.2.2.2.21
delete "this section is for future stud	y"; Add section defining details of	ARQ function."	
Reason			
ARQ needs to be better defined bef	ore the draft is approved.		
Proposed Resolution Recommend	dation:	Recommendation by	
Reason for Recommendation			
Resolution of Group Decis	ion of Group: Accepted-Modified		
delete section 6.2.2.2.21 ARQ-ACK	Message. Also remove it from pa	age 56, line 17, in table 3.	
Reason for Group's Decision/Resolution	วท		
This is the place holder for PARs 80	02.16a and 802.16b to complete.	802.16 systems above 10 GHz opera	te without ARQ and so it is not
necessary in the current version of t	the standard. To clarfy this point A	RQ-ACK message was deleted.	
Group's Notes			
Group's Action Items			
Editor's Notes Editor's	Actions e) done		
Marked Type 25 as "Reserved for fu	uture use"		
Editor's Questions and Concerns			
Editor's Action Items			

Document under Review	<i>w</i> :	Ballot	t Number: <mark>#</mark>	3			Comment Date
Comment # 772	Comment submitted	by: Keith	Doucet		Ν	Nember	
Change Type Tec	hnical, Binding	Starting Page #	61	Starting Line #	ŧ 34	Section	6.2.2.2.3-4
DL-MAP and UL-MAP s MIMO.	should be adapted to su	upport allocation on be	oth frequen	cy and time dom	ain for OFD	M and for	multiple antennas for
Reason							
OFDM and MIMO are r scheme refers to a sing					_OS enviror	nment. The	e current allocation
Proposed Resolution	Recommendation:		Recommen	dation by			
Reason for Recommendat	tion						
<b>Resolution of Group</b>	Decision of Grou	p: Superceded					
The burst descriptors w	ere moved these to the	PHY specific section	s to allow f	uture PHYs to de	fine their ov	vn.	
Reason for Group's Deci	ision/Resolution						
Currently no OFDM PH	Y is defined in the spec	cification. OFDM is co	onsidered u	nder PARs 802.1	6a and 802	2.16b.	
Group's Notes							
Group's Action Items							
Editor's Notes	Editor's Actions f) r	one needed					
Editor's Questions and C	Concerns						
Editor's Action Items							



Document u	nder Review	:	Ballot	Number: <b>#3</b>			Comment Date
Comment #	773	Comment submitted by:	Chet	Shirali		Member	
Change	Type Tech	nical, Binding	Starting Page #	61 s	tarting Line # 34	Section <mark>6</mark> .	2.2.2.3-4
DL-MAP and MIMO. Reason	UL-MAP sł	nould be adapted to supp	ort allocation on bo	th frequency a	nd time domain for (	OFDM and for mu	Iltiple antennas for
		quired by customers to su scheme where the allocat				nment. The currer	nt allocation scheme
Proposed Res	olution	Recommendation:		Recommendatio	n by		
Reason for Re	ecommendatio	on					
Resolution of 772	Group	Decision of Group: S	uperceded				
Reason for G	roup's Decis	ion/Resolution					
Group's Notes	5						
Group's Action	n Items						
Editor's Notes	5	Editor's Actions f) none	needed				
Editor's Quest	ions and Co	oncerns					
Editor's Action	n Items						



Document	under R	eview:				Ballot	Number:	# 3				Comment Date
Comment #	1066		Comment sub	omitted by:	George		Fishel			Ме	mber	
Change	Туре	Techni	ical, Binding		Starting	Page #	61	Starting Li	ne #	34	Section	6.2.2.2.3-4
DL-MAP an MIMO.	d UL-M	AP sho	ould be adapt	ed to supp	ort allocatio	on on bo	th freque	ency and time of	doma	ain for OFDN	l and for	multiple antennas for
Reason												
			uired by cust cheme where						LOS	environment	. The cu	rrent allocation scheme
Proposed Re	esolution	R	ecommendatio	on: Superce	eded		Recomm	endation by Rog	ger Ma	arks		
Reason for I	Recomme	endation	1									
Duplicate of	f 772, 7	73, 106	67, and 1068									
Resolution of	f Group		Decision	of Group: S	Superceded							
Reason for See 772	Group's	Decisio	n/Resolution									
Group's Note	es											
Group's Action	on Items	;										
Editor's Note	es		Editor's Acti	ons f) none	needed							
Submitted in	n LB#3,	but ac	cidentally left	t out of res	olution data	abase.						
Editor's Ques	stions a	nd Cond	cerns									
Editor's Action	on Items	5										



Document und	er Review:		Ba	llot Number: 🛔	±3		Comment Date
Comment # 10	67	Comment submitted by:	David	Ribner		Member	
Change T	ype Technic	cal, Binding	Starting Page	e # <mark>61</mark>	Starting Line # 34	Section 6.2.2	.2.3-4
DL-MAP and U MIMO.	L-MAP shou	uld be adapted to suppo	ort allocation on	both frequer	cy and time domain for	OFDM and for multip	le antennas for
Reason							
		ired by customers to su heme where the allocat	1 I I		peration in NLOS enviro nain.	onment. The current a	llocation scheme
Proposed Resolu	ution Re	commendation: Superce	ded	Recommer	dation by Roger Marks		
Reason for Reco	ommendation						
Duplicate of 77	2, 773, 106	6, and 1068.					
Resolution of Gr 772	oup	Decision of Group: S	uperceded				
Reason for Grou See 772	ıp's Decision	/Resolution					
Group's Notes							
Group's Action I	tems						
Editor's Notes		Editor's Actions f) none	needed				
Submitted in LE	3#3, but acc	identally left out of reso	olution database	Э.			
Editor's Question	is and Conc	erns					
Editor's Action I	tems						



Document un	der Re	view:		Ballot	Number: <b>#</b>	3		Comment Date
Comment # 1	068	Comment submitted by:	Menashe		Shahar		Member	
Change -	Туре	Fechnical, Binding	Starting	Page #	61	Starting Line # 34	Section	6.2.2.2.3-4
MIMO.	JL-MA	P should be adapted to suppo	ort allocatio	on on bo	th frequend	cy and time domain f	or OFDM and for	multiple antennas for
Reason								
		re required by customers to su single carrier scheme where th					environment. The	e current allocation
Proposed Reso	lution	Recommendation: Superce	ded		Recommen	dation by Roger Marks		
Reason for Rec	comme	ndation						
Duplicate of 7	72, 77	3, 1066, and 1067.						
Resolution of G	iroup	Decision of Group: S	uperceded					
Reason for Gro See 772	oup's [	Decision/Resolution						
Group's Notes								
Group's Action	Items							
Editor's Notes		Editor's Actions f) none	needed					
Submitted in L	.B#3, I	out accidentally left out of reso	olution data	abase.				
Editor's Questio	ons an	d Concerns						
Editor's Action	Items							

#### 802.16/D2-2001

Document u	under Review:		Ballot	Number: <b># 3</b>			Comment Date
Comment #	796	Comment submitted by:	Keith	Doucet		Member	
Change	туре Techn	ical, Binding	Starting Page #	124	Starting Line # 37	Section 6.2.7	

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization. Both initial selection and on the fly channel changing should be supported.

#### Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow.

Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while

Proposed Resolution Recommendation: Recommendation by

Reason for Recommendation

Resolution of Group Decision of Group: Rejected

Reason for Group's Decision/Resolution

The text in the MAC specification has been made generic enough to accomadate all PHYs. Any rules that are necessary for a specific PHY will be included within the appropriate PHY section. RNG-RSP can direct an SS to a different channel. In addition, a BS ID is present to allow an SS to register only with a pre-specified BS.

Group's Notes Group's Action Items

Editor's Notes Editor's Actions f) none needed

**Editor's Questions and Concerns** 

**Editor's Action Items** 

2001/07/13	3				802.1	6/D2-2001	
Document ι	under Review:			Ballot Number: #	3		Comment Date
Comment #	797	Comment submitted by:	Chet	Shirali		Member	
Change	туре <mark>Tech</mark> n	ical, Binding	Starting I	Page # 124	Starting Line # 37	Section 6	6.2.7
PHY parame	eters (more ro		out tradeoff),	geographical loc	ased on frequency sele ation, antenna direction		
scanning for change mes Channels ma	downstream, sages will ma ay have big d	and the first one in the ake the initialization ver ifference in the perform	UCD for ups y slow. ance per SS,	tream. This will r	al implementation to sel esult in a very unloaded equency diversity in NLC It is important to select	system and mai OS channels, cha	naging it with channel annels that serve
Proposed Res	solution F	Recommendation:		Recommen	dation by		
Reason for R	ecommendatio	ı					
Resolution of 796	Group	Decision of Group: §	Superceded				
Reason for G See 796	Group's Decisio	on/Resolution					
Group's Note	S						
Group's Actio							
Editor's Notes	S	Editor's Actions f) none	eneeded				
Editor's Ques Editor's Actio	tions and Con n Items	cerns					

#### 802.16/D2-2001

Document u	Inder Review:		Ballot	Number: #3			Comment Date
Comment #	1073	Comment submitted by:	George	Fishel		Member	
Change	Type Techn	ical, Binding	Starting Page #	124	Starting Line # 37	Section 6.2.7	

Initialization procedure should be changed to optimize the channel selection, based on frequency selective performance, channels load, PHY parameters (more robust or higher throughput tradeoff), geographical location, antenna direction (sector) and polarization. Both initial selection and on the fly channel changing should be supported.

#### Reason

The current proposal can cause a SS to randomly select a channel or in a typical implementation to select the first one that is found in the scanning for downstream, and the first one in the UCD for upstream. This will result in a very unloaded system and managing it with channel change messages will make the initialization very slow. Channels may have big difference in the performance per SS, based on the frequency diversity in NLOS channels, channels that serve different antenna sectors or cells, and channels with different PHY parameters. It is important to select the optimal channel per SS, while maintaining load balance in the whole system.

**Recommendation: Superceded Proposed Resolution** Recommendation by Roger Marks **Reason for Recommendation** Duplicate of 796, 797, and 1074. **Decision of Group: Superceded Resolution of Group** 796 Reason for Group's Decision/Resolution See 796 **Group's Notes Group's Action Items Editor's Notes** Editor's Actions f) none needed Submitted in LB#3, but accidentally left out of resolution database. **Editor's Questions and Concerns Editor's Action Items** 

#### 802.16/D2-2001

Document Comment #	under Review:	Comment submitted by:	Menashe	Ballot	Numbe Shahar			Member		Comment Date
Change		nical, Binding		Page #	124	Starting Line #	37	Section	6.2.7	
PHY param	neters (more r	hould be changed to opt obust or higher throughp on the fly channel chang	out tradeoff)	, <mark>geog</mark> ra	phical	location, antenna dir			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
scanning fo change me Channels n	or downstream ssages will m nay have big o	cause a SS to randomly and the first one in the ake the initialization very difference in the perform or cells, and channels w	UCD for up / slow. ance per SS	stream. S, basec	This w	ill result in a very un e frequency diversity	loaded s in NLOS	ystem and m S channels, cl	anaging it hannels th	with channel at serve

**Proposed Resolution Recommendation:** Superceded **Recommendation by Roger Marks Reason for Recommendation** Duplicate of 796, 797, and 1073. Resolution of Group **Decision of Group: Superceded** 796 Reason for Group's Decision/Resolution See 796 Group's Notes **Group's Action Items Editor's Notes** Editor's Actions f) none needed Submitted in LB#3, but accidentally left out of resolution database. **Editor's Questions and Concerns Editor's Action Items** 



Document under	Review:	Ballot	Number: #3	}		Comment Date
Comment # 717	Comment submitted by:	Bruce	Currivan		Member	
Change Type	e Technical, Binding	Starting Page #	26	Starting Line #	10 Section	5.1.3
Insert more comp DOCSIS.	lete information on payload hea	der suppression for	ATM. Exte	nded header sho	uld be included, as,	for example, in
Reason						
Existing definition	of payload header suppression	n with ATM is ambig	juous.			
Proposed Resolution	on Recommendation:		Recommenda	ation by		
Reason for Recom	nendation					
Resolution of Group	p Decision of Group:	Rejected				
ATM payload hea	s Decision/Resolution der supression requires no exte sument in section 5.1.	ended/sub-headers.	The exact r	napping of ATM h	neader fields to the A	ATM CS header is fully
Similar suggestion	ns were extensively debated ar	nd rejected during de	evelopment	of the draft.		
Group's Notes						
Group's Action Iter	ns					
Editor's Notes	Editor's Actions f) none	e needed				
Editor's Questions	and Concerns					
Editor's Action Iter	ns					

Document under Review:	Ballot	Number: <b>#3</b>				Comment Date
Comment # 733 Comment submitted by: Bruce		Currivan			Member	
Change Type Technical, Binding Starting	g Page #	103	Starting Line #	ŧ 1	Section	6.2.3.2
Insert numerical limitation on the number of fragmentation fle Reason	lows opei	n at once.				
Incomplete specification. Without a limit specified, the mem	nory size	of the implen	nentation could	d become i	unbounded.	
Proposed Resolution Recommendation:		Recommendat	tion by			
Reason for Recommendation						
Resolution of Group Decision of Group: Rejected						
Reason for Group's Decision/Resolution The number of supported service flows is bounded via SS of state. This bounds the required memory size for an implement Group's Notes		negotiation.	Each service	flow can or	nly have one	e SDU in a fragmented
Group's Action Items						
Editor's Notes Editor's Actions f) none needed						
Editor's Questions and Concerns Editor's Action Items						

Document under Revie	ew:	Ba	llot Number: 🕯	<b># 3</b>		Comment Date
Comment # 1047	Comment submitted by:	Srinath	Hosur		Member	
Change Type Te	chnical, Binding	Starting Page	e #	Starting Line #	Section	
Need the extended he	ader feature of DOCSIS to	be reflected in C	hapter 6 of t	ne TG1 spec.		
Reason						
The extended header	adds to the flexibility to add	new features lik	e ARQ.			
Proposed Resolution	Recommendation: Superce	ded	Recomme	dation by Roger Marks		
Reason for Recommend	ation					
Comment is a subset of	of 717, 766, and 767.					
Resolution of Group	Decision of Group: R	ejected				
Reason for Group's De Same functionality is	cision/Resolution accomplished using sub-he	eaders and the <sup>-</sup>	Type field.			
-	ere extensively debated an			nt of the draft.		
Group's Notes						
Group's Action Items						
Editor's Notes	Editor's Actions f) none	needed				
Submitted in LB#3, bu	t accidentally left out of res	olution database	).			
Editor's Questions and	Concerns					
Editor's Action Items						



Document u	under Review:		Ballot	Number: <b>#3</b>			Comment Date
Comment #	748	Comment submitted by:	Keith	Doucet		Member	
Change	Type Tech	nical, Binding	Starting Page #	Starting	Line #	Section	
Proposals fo March 7, 200	•	es of message formats th	at support the abov	ve comments are incl	uded in doc	ument number 802.16-3	c-01/37 dated
Reason							
Faster to ma	rket with mat	tured standard.					
Proposed Res	solution	Recommendation:		Recommendation by			
Reason for R	ecommendatio	'n					
Resolution of	Group	Decision of Group: R	ejected				
significantly	ed message s compromisin estions were s n Items s tions and Co	set doesn't provide adeque g the technical quality of e extensively debated and Editor's Actions f) none	the standard. d rejected during de			orter time to market doe	s not warrant
LUILUI 5 ACLIO							

Document under Re	eview:	Ballot	Number: <b>#3</b>		Comment Date
Comment # 749	Comment submitted by	·: Chet	Shirali	Member	
Change Type	Technical, Binding	Starting Page #	Starting Li	ne# Section	
Proposals for the ch March 7, 2001	anges of message formats	that support the abov	re comments are include	ed in document number 802.16-	-3c-01/37 dated
Reason					
Faster to market wit	h matured standard.				
Proposed Resolution	<b>Recommendation:</b>		Recommendation by		
Reason for Recomme	ndation				
Resolution of Group 748	Decision of Group:	Superceded			
Reason for Group's I See 748	Decision/Resolution				
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions f) nor	ne needed			
Editor's Questions an	d Concerns				
Editor's Action Items					

Document u	nder R	eview:	Ballot	Number: <b># 3</b>			Comment Date
Comment #	1048	Comment submitted by:	George	Fishel		Member	
Change	Туре	Technical Binding	Starting Page #	S	Starting Line #	Section	
Proposals fo March 7, 200		nanges of message formats th	at support the abo	ve comments a	re included in a	document number 802.16	-3c-01/37 dated
Reason							
Faster to ma	rket wit	th matured standard.					
Proposed Res	solution	Recommendation: Superce	eded	Recommendatio	on by Roger Mark	S	
Reason for R Duplicate of		endation 49, and 1049.					
Resolution of 748	Group	Decision of Group: S	Superceded				
Reason for G See 748	iroup's	Decision/Resolution					
Group's Notes	S						
Group's Actio	n Items						
Editor's Notes	5	Editor's Actions f) none	needed				
Submitted in	LB#3,	but accidentally left out of res	olution database.				
Editor's Quest	tions ar	nd Concerns					
Editor's Actio	n Items						

Document	under Re	view:	Ballo	t Number: <b>#3</b>			Comment Date
Comment #	1049	Comment submitted by:	Menashe	Shahar		Member	
Change	Туре Т	echnical, Binding	Starting Page #	ŧ	Starting Line #	e Section	
Proposals fo March 7, 20		anges of message formats th	at support the abo	ve comments	are included i	n document number 802.	16-3c-01/37 dated
Reason							
Faster to ma	arket with	n matured standard.					
Proposed Re	solution	Recommendation: Superce	ded	Recommendat	tion by Roger M	larks	
Reason for F Duplicate of		dation 9, and 1048.					
Resolution of 748	Group	Decision of Group: S	uperceded				
Reason for C See 748	Group's D	ecision/Resolution					
Group's Note	s						
Group's Actio	on Items						
Editor's Note	s	Editor's Actions f) none	needed				
Submitted in	n LB#3, k	out accidentally left out of res	olution database.				
Editor's Ques	tions and	l Concerns					
Editor's Actio	on Items						

Document under Review:		Ballot	Number: #3		Comment Date
Comment # 774	Comment submitted by:	Keith	Doucet	Member	
Change Type Technic	cal, Binding	Starting Page #	67 Starting Li	ne # 54 Section	6.2.2.2.5
RNG-REQ should include the Research	feedback information re	egarding the downst	tream reception, such a	s CNR and error rate.	
Reason This information is required allocations.	d to enable the BS to m	nake decisions for a	daptive modulation, cha	annel switching, ARQ, MIN	VIO and OFDM
Proposed Resolution Re	ecommendation:		Recommendation by		
Reason for Recommendation					
Resolution of Group	Decision of Group: F	Rejected			
Reason for Group's Decision The requested functionality uses less link capacity that	is achieved by allowir	•		wnlink transmissions. Thi	s method is faster and
Group's Notes					
Group's Action Items					
Editor's Notes	Editor's Actions f) none	needed			
Editor's Questions and Conc	erns				
Editor's Action Items					

Document	under Revi	ew:		Ballot Number:	<b># 3</b>		Comment Date
Comment #	775	Comment submitted	by: Chet	Shirali		Member	
Change	Туре Те	echnical, Binding	Starting	Page # 67	Starting Line # 54	Section 6.2.2.2.5	
RNG-REQ Reason	should incl	ude feedback informatio	on regarding the	e downstream rec	eption, such as CNR and e	rror rate.	
This informations.		uired to enable the BS	to make decisic	ons for adaptive m	odulation, channel switchir	ig, ARQ, MIMO and Of	-DM
Proposed Re	esolution	<b>Recommendation:</b>		Recomme	ndation by		
Reason for	Recommend	ation					
Resolution o see 774	f Group	Decision of Grou	up: Superceded				
Reason for	Group's De	cision/Resolution					
Group's Not	es						
Group's Acti	on Items						
Editor's Not	es	Editor's Actions f)	none needed				
Editor's Que Editor's Acti		Concerns					

Document	under R	leview:			Ballot	Number: <b>#3</b>				Comment Date
Comment #	1069	Comr	nent submitted by:	George		Fishel			Member	
Change	Туре	Technical, E	Binding	Starting	Page #	67	Starting Lir	ne # 54	4 Section	6.2.2.2.5
RNG-REQ s Reason	should i	nclude feedb	back information	regarding the	e downs	tream recept	ion, such a	s CNR	and error rate.	
This informa allocations.		required to e	nable the BS to i	make decisio	ons for a	daptive mod	ulation, cha	annel sv	vitching, ARQ, MIN	IO and OFDM
Proposed Re	solution	Recom	mendation: Superc	eded		Recommenda	tion by Rog	ger Marks		
Reason for F Duplicate of		endation 75, 1066, an	d 1070.							
Resolution of See 774	f Group	D	ecision of Group:	Superceded						
Reason for	Group's	Decision/Reso	olution							
Group's Note	es									
Group's Action	on Items	5								
Editor's Note	es	Edito	r's Actions f) non	e needed						
Submitted in	n LB#3,	but acciden	tally left out of re	solution data	abase.					
Editor's Ques Editor's Actio										

Document under I	Review:	Ballot	Number: <b>#3</b>		Comment Date
Comment # 1070	Comment submitted by:	Menashe	Shahar	Member	
Change Type	Technical, Binding	Starting Page #	67 Starting	Line # 54 Sec	tion 6.2.2.2.5
RNG-REQ should Reason	include feedback information r	egarding the downs	tream reception, suc	h as CNR and error rate	
This information is allocations.	required to enable the BS to n	nake decisions for a	daptive modulation,	channel switching, ARQ,	MIMO and OFDM
Proposed Resolution	n Recommendation: Superc	eded	Recommendation by	Roger Marks	
Reason for Recomm Duplicate of 774, 7	endation 775, 1066, and 1069.				
Resolution of Group see 774	Decision of Group:	Superceded			
Reason for Group's	Decision/Resolution				
Group's Notes					
Group's Action Item	S				
Editor's Notes	Editor's Actions f) none	e needed			
Submitted in LB#3	, but accidentally left out of res	solution database.			
Editor's Questions a	and Concerns				
Editor's Action Item	IS				



Document und	der Review:		Ba	llot Number: 🔒	<b># 3</b>		Comment Date
Comment # 76	63	Comment submitted by:	Keith	Doucet		Member	
Change T	Type Technic	cal, Binding	Starting Page	e # <mark>38</mark>	Starting Line # 1	Section 6	
Timing mechar	nisms should	d be defined and adapt	ed for an OFDM	I PHY.			
Reason							
OFDM PHY is	required by	customers to support r	eliable and effic	ient operation	n in NLOS environment. T	The proposed timing	scheme is
designed for si	ngle carrier	where the data is sprea	ad only on the ti	me domain. F	For OFDM it is required to	define exactly the ti	me reference of
the time related	d messages.	. It is required to define	an efficient me	chanism for th	ne initial ranging on OFDN	И.	
Proposed Resolu	ution Re	ecommendation:		Recomme	ndation by		
Reason for Reco	ommendation						
Resolution of Gr	roup	Decision of Group: R	lejected				
Reason for Grou	up's Decisior	n/Resolution					
If an OFDM PH	HY is added	in the future, the timing	mechanism wil	l be defined i	n the particular PHY section	on at that time.	
Group's Notes							
Group's Action	Items						
Editor's Notes		Editor's Actions f) none	needed				
Editor's Question	ns and Conc	erns					
Editor's Action	Items						

Document	under F	leview:	Ballot	t Number: <b># 3</b>			Comment Date
Comment #	765	Comment submitted b	y: Chet	Shirali		Member	
Change	Туре	Technical, Binding	Starting Page #	38	Starting Line # 1	Section 6	
Timing med Reason	hanism	s should be defined and ada	apted for an OFDM P	HY.			
designed fo	, or single	ired by customers to suppor carrier where the data is sp essages. It is required to defi	read only on the time	domain. For	OFDM it is required to o	define exactly the tim	•
Proposed Re	esolution	Recommendation:		Recommenda	tion by		
Reason for	Recomm	endation					
Resolution o	f Group	Decision of Group	9: Superceded				
Reason for See 763	Group's	Decision/Resolution					
Group's Not	es						
Group's Acti	on Item	6					
Editor's Not	es	Editor's Actions f) no	one needed				
Editor's Que	stions a	nd Concerns					
Editor's Acti	on Items	5					

Document	under Review:			Ballot	Numbe	er: #3				Comment Date
Comment #	1052	Comment submitted by:	George		Fishel		Ν	lember		
Change	Type Tech	nical, Binding	Starting	Page #	38	Starting Line #	1	Section	6	
Timing mecl	hanisms shou	uld be defined and adapte	ed for an O	FDM PI	HY.					
Reason										
designed for	r single carrie	y customers to support re or where the data is spreates. It is required to define	d only on t	he time	domai	n. For OFDM it is requ	uired to def			
Proposed Re	solution	Recommendation: Superce	ded		Recom	mendation by Roger Ma	rks			
Reason for F	Recommendatio	n								
Duplicate of	763, 765, 10	)53, and 1054.								
Resolution of 763	Group	Decision of Group: S	uperceded							
Reason for ( See 763	Group's Decisi	on/Resolution								
Group's Note	es									
Group's Actio	on Items									
Editor's Note	es	Editor's Actions f) none	needed							
Submitted ir	n LB#3, but a	ccidentally left out of reso	olution data	abase.						
Editor's Ques	stions and Co	ncerns								
Editor's Actio	on Items									

Document	t under Review	:	В	Ballot Number:	<b># 3</b>		Comment Date
Comment #	¥ 1053	Comment submitted by:	David	Ribner		Member	
Change	Type Tech	nical, Binding	Starting Pag	ge # 38	Starting Line # 1	Section 6	
Timing me	chanisms sho	uld be defined and adapt	ed for an OFD	M PHY.			
Reason							
designed f	or single carrie	by customers to support r er where the data is sprea es. It is required to define	ad only on the t	time domain. F	or OFDM it is required to	define exactly the tin	•
Proposed F	Resolution	Recommendation: Superce	ded	Recomme	ndation by Roger Marks		
Reason for	Recommendation	on					
Duplicate of	of 763, 765, 1	052, and 1054.					
Resolution	of Group	Decision of Group: S	uperceded				
See 763							
Reason for	Group's Decis	ion/Resolution					
Group's No	tes						
Group's Act	tion Items						
Editor's No	tes	Editor's Actions f) none	needed				
Submitted	in LB#3, but a	accidentally left out of res	olution databas	se.			
Editor's Que	estions and Co	oncerns					
Editor's Act	tion Items						

Document	under Review:			Ballot	Number	÷ # 3				Comment Date
Comment #	1054	Comment submitted by:	Menashe		Shahar			Member		
Change	Type Techr	nical, Binding	Starting	Page #	38	Starting Line #	ŧ 1	Section	6	
Timing mec Reason	hanisms shou	Ild be defined and adapte	ed for an O	FDM PI	HY.					
designed fo	r single carrie	y customers to support re r where the data is sprea s. It is required to define	d only on t	he time	domain	. For OFDM it is rec	quired to c	lefine exactly		•
Proposed Re	esolution I	Recommendation: Superce	ded		Recom	mendation by Roger M	larks			
	Recommendatio f 763, 765, 10	n 52, and 1053.								
Resolution of 763	f Group	Decision of Group: S	uperceded							
Reason for ( See 763	Group's Decisio	on/Resolution								
Group's Note	es									
Group's Action	on Items									
Editor's Note	es	Editor's Actions f) none	needed							
Submitted in	n LB#3, but a	ccidentally left out of reso	olution data	lbase.						
Editor's Que	stions and Cor	ncerns								
Editor's Action	on Items									

Document under	Review:	Ballot	Number: <b># 3</b>		Comment Date
Comment # <b>762</b>	Comment submitted b	y: Keith	Doucet	Member	
Change Type	Technical, Binding	Starting Page #	38 Starting Line #	1 Section 6	
Use DOCSIS 1.1 Reason	QoS.				
Compatibility with	other products, mainly VoIP	and management tool	ls.		
Proposed Resolutio	n Recommendation:		Recommendation by		
Reason for Recomm	nendation				
Resolution of Group	Decision of Group	: Rejected			
Current QoS origin	Decision/Resolution nated from the source referen ns were extensively debated a			d to meet 802.16's needs.	
Group's Notes					
Group's Action Item	IS				
Editor's Notes	Editor's Actions f) no	ne needed			
Editor's Questions	and Concerns				
Editor's Action Item	IS				

Document under	Review:	Ballot	Number: <b># 3</b>		Comment Date
Comment # 764	Comment submitted by:	Chet	Shirali	Member	
Change Type	e Technical, Binding	Starting Page #	38 Starting Line # 1	Section 6	
Use DOCSIS 1.1 Reason	QoS.				
Compatibility with	other products, mainly VoIP and	l management tool	S.		
Proposed Resolution	on Recommendation:		Recommendation by		
Reason for Recom	mendation				
Resolution of Group	p Decision of Group: St	Iperceded			
Reason for Group's See 762	s Decision/Resolution				
Group's Notes					
Group's Action Iter	ns				
Editor's Notes	Editor's Actions f) none n	needed			
Editor's Questions Editor's Action Iter					

Document under Review	<i>ı</i> :	Ballot	Number: <b>#3</b>			Comment Date
Comment # <b>1055</b>	Comment submitted by:	George	Fishel		Member	
Change Type Tech Use DOCSIS 1.1 QoS. Reason Compatibility with other	nnical, Binding products, mainly VoIP an	Starting Page # d management too		ng Line # 1	Section 6	
Proposed Resolution	Recommendation: Superce	eded	Recommendation by	Roger Marks		
Reason for Recommendat Duplicate of 762, 764, a Resolution of Group 762 Reason for Group's Decis See 762	and 1056. Decision of Group: s	Superceded				
Group's Notes Group's Action Items Editor's Notes Submitted in LB#3, but Editor's Questions and C Editor's Action Items	Editor's Actions f) none accidentally left out of res oncerns					

Document under Review	<i>r</i> :	Ballot	t Number: <b># 3</b>			Comment Date
Comment # 1056	Comment submitted by:	Menashe	Shahar		Member	
Change Type Tech Use DOCSIS 1.1 QoS. Reason Compatibility with other	nnical, Binding products, mainly VoIP an	Starting Page # d management too		ng Line # 1	Section 6	
Proposed Resolution	Recommendation: Superce	eded	Recommendation by	y Roger Marks		
Reason for Recommendati Duplicate of 762, 764, a Resolution of Group 762 Reason for Group's Decis See 762	nd 1055. Decision of Group: S	superceded				
Group's Notes Group's Action Items Editor's Notes Submitted in LB#3, but a Editor's Questions and Co Editor's Action Items	Editor's Actions f) none accidentally left out of res oncerns					

Document under Review:	Ballot	Number: #3	Comment E	Date			
Comment # 768 Comment submit	ted by: Keith	Doucet	Member				
Change Type Technical, Binding	Starting Page #	54 Starting Line # 44	Section 6.2.2.2				
Use IEEE 802.2 format to pack MAC mana	agement messages						
Reason							
1. Required for IP centric protocol (see cor	nment 1).						
2. Following other mature standards and p	roducts - other IEEE 802 st	tandards and DOCSIS					
Proposed Resolution Recommendation:		Recommendation by					
Reason for Recommendation							
Resolution of Group Decision of	Group: Rejected						
Reason for Group's Decision/Resolution The 802.2 format is appropriate for LAN applications. 802.16 addresses access applications. It is designed for a multiprotocol environment including IP and 802.2 packets among others. Similar suggestions were extensively debated and rejected during development of the draft.							
Group's Notes							
Group's Action Items							
Editor's Notes Editor's Actions	f) none needed						
Editor's Questions and Concerns							
Editor's Action Items							

Document	under R	eview:			Ballot	Number: <b>#3</b>					Comment	Date
Comment #	769	Commen	t submitted by:	Chet		Shirali		N	lember			
Change	Туре	Technical, Bind	ding	Starting	Page #	54	Starting Line #	ŧ 44	Section	6.2.2.2		
Use IEEE 8	02.2 for	mat to pack MA	AC managemen	t messages	6							
Reason												
2. Following	g other r	nature standard	(see comment 1 ds and products using the same	- other IEE				ages				
Proposed Re	esolution	Recommen	ndation:			Recommenda	tion by					
Reason for I	Recomme	endation										
Resolution of	f Group	Decis	sion of Group: <mark>S</mark>	uperceded								
768												
Reason for 0 See 768	Group's	Decision/Resolut	ion									
Group's Note	es											
Group's Action		;										
Editor's Note	es	Editor's	Actions f) none	needed								
Editor's Ques Editor's Actio												

Document under Review	<b>v</b> :	Ballot	Number: <b>#3</b>			Comment Date
Comment # <b>1061</b>	Comment submitted by:	George	Fishel	Ν	lember	
Use IEEE 802.2 format Reason	hnical, Binding to pack MAC managemen ic protocol (see comment <sup>-</sup>	C C	54 Startin	ng Line # 44	Section 6.2.2.2	
Proposed Resolution	Recommendation: Superce	ded	Recommendation by	Roger Marks		
Reason for Recommendat Duplicate of 768, 769, a Resolution of Group 768 Reason for Group's Deci See 768	and 1062. Decision of Group: S	uperceded				
Group's Notes Group's Action Items Editor's Notes Submitted in LB#3, but Editor's Questions and C Editor's Action Items	Editor's Actions f) none accidentally left out of res concerns					

Document	under Review	<i>w</i> :	В	allot	Number: <b>#3</b>				Comment	Date
Comment #	1062	Comment submitted by:	Menashe		Shahar		Member			
Change	Туре <mark>Тес</mark>	hnical, Binding	Starting Pag	ge#	54	Starting Line # 44	Section	6.2.2.2		
Use IEEE 8	02.2 format	to pack MAC managemen	t messages							
Reason										
<ol> <li>Required for IP centric protocol (see comment 1).</li> <li>Following other mature standards and products - other IEEE 802 standards and DOCSIS.</li> </ol>										
Proposed Re	esolution	Recommendation: Superce	ded		Recommenda	tion by Roger Marks				
Reason for F	Recommendat	tion								
Duplicate of	f 768, 769, a	and 1061.								
Resolution of 768	f Group	Decision of Group: S	uperceded							
Reason for (	Group's Deci	sion/Resolution								
See 768										
Group's Note	es									
Group's Actio	on Items									
Editor's Note	es	Editor's Actions f) none	needed							
Submitted in	n LB#3, but	accidentally left out of res	olution databas	se.						
Editor's Ques	stions and C	Concerns								
Editor's Action	on Items									